Claims

1. (Currently Amended) A method for transmitting data from a sender to a receiver in a digital communications network, comprising the steps of:

maintaining a current estimate of bandwidth available from the sender to the receiver; and

modifying data input for transmission in real time based on the current estimate of available bandwidth and a data-display processing requirement at the receiver that is independent of network congestion or bandwidth in order to maintain an acceptable sequence of data received by the receiver that is consistent with the data-display processing requirement at the receiver;

wherein maintaining ~~a~~ the current estimate of bandwidth available comprises a measure of congestion, ~~and~~ wherein modifying the data input for transmission in real time comprises dropping a ~~selected~~ particular data frame in response to the measure of congestion, and ~~consistent with the~~ wherein the particular data frame dropped is selected in consideration of the data-display processing requirement at the receiver.

2. (Previously presented) The method according to claim 1, wherein the data comprises compressed video data.

3. (previously presented) The method according to claim 1, wherein maintaining the current estimate of bandwidth comprises monitoring of packet loss based on acknowledgments from the receiver.

4. (previously presented) The method according to claim 1, wherein, in maintaining the current estimate of bandwidth, the sender maintains a count of packets outstanding.

5. (previously presented) The method according to claim 4, wherein, in maintaining the current estimate of bandwidth, the sender maintains current an upper bound on how many packets are allowed to be outstanding.

6. (Original) The method according to claim 5, wherein the upper bound is as specified by the TCP congestion window.

7. (previously presented) The method according to claim 1, wherein, in maintaining the current estimate of bandwidth, the sender maintains a count of bytes outstanding.

8. (previously presented) The method according to claim 7, wherein, in maintaining the current estimate of bandwidth, the sender maintains current an upper bound on how many bytes are allowed to be outstanding.

9. (Original) The method according to claim 8, wherein the upper bound is as specified by the TCP congestion window.

10. (Original) The method according to claim 1, further comprising retransmitting a packet which has been determined by the receiver as having been lost in transmission or received with an error.

11. (Original) The method according to claim 1, further comprising adapting bandwidth required by the data.

12. (Original) The method according to claim 1, further comprising discriminating between packets lost due to congestion in the network and packets received with at least one bit error.

13. (Currently Amended) A system for transmitting data from a sender to a receiver in a digital communications network, comprising:

means for maintaining a current estimate of bandwidth available from the sender to the receiver; and

means for modifying data input for transmission for transmission in real time based on the current estimate of available bandwidth and a data-display processing requirement at the receiver in order to maintain an acceptable sequence of data received by the receiver that is consistent with the data-display processing requirement at the receiver;

wherein maintaining the current estimate of bandwidth available comprises a measure of congestion, ~~and~~ wherein modifying the data input for transmission in real time comprises dropping a ~~selected~~ particular data frame in response to the measure of congestion, and ~~consistent with the~~ wherein the particular data frame dropped is selected in consideration of the data-display processing requirement at the receiver.

14. (Previously presented) The system according to claim 13, wherein the data comprises compressed video data.

15. (Previously presented) The system according to claim 13, wherein the means for maintaining the current estimate of bandwidth comprises means for monitoring of packet loss based on acknowledgments from the receiver.

16. (Previously presented) The system according to claim 13, wherein the means for maintaining the current estimate of bandwidth comprises means for maintaining a count of packets outstanding.

17. (Previously presented) The system according to claim 16, wherein the means for maintaining the current estimate of bandwidth comprises means for maintaining current an upper bound on how many packets are allowed to be outstanding.

18. (Original) The system according to claim 17, wherein the upper bound is as specified by the TCP congestion window.

19. (Currently amended) The system according to claim 13, wherein the means for maintaining the current estimate of bandwidth comprises means for maintaining a count of bytes outstanding.

20. (Currently amended) The system according to claim 19, wherein the means for maintaining the current estimate of bandwidth comprises means for maintaining current an upper bound on how many bytes are allowed to be outstanding.

21. (Currently amended) The system according to claim 20, wherein the upper bound is as specified by the TCP congestion window.

22. (Original) The system according to claim 13, further comprising means for retransmitting a packet which has been determined by the receiver as having been lost in transmission or received with an error.

23. (Original) The system according to claim 13, further comprising means for adapting bandwidth required by the data.

24. (Original) The system according to claim 13, further comprising means for discriminating between packets lost due to congestion in the network and packets received with at least one bit error.

25. (Currently Amended) A system for transmitting data from a sender to a receiver in a digital communications network, comprising a processor which is instructed for:

maintaining a current estimate of bandwidth available from the sender to the receiver; and

modifying data input for transmission in real time based on the current estimate of available bandwidth and a data-display processing requirement at the receiver in order to maintain an acceptable sequence of data received by the receiver that is consistent with the data-display processing requirement at the receiver;

wherein maintaining a the current estimate of bandwidth available comprises a measure of congestion, and wherein modifying the data input for transmission in real time comprises dropping a ~~selected~~ particular data frame in response to the measure of congestion, and ~~consistent with the~~ wherein the particular data frame dropped is selected in consideration of the data-display processing requirement at the receiver.

26. (Previously presented) The system according to claim 25, wherein the data comprises compressed video data.

27. (Original) The system according to claim 25, wherein maintaining the estimate of bandwidth comprises monitoring of packet loss based on acknowledgments from the receiver.

28. (Original) The system according to claim 25, wherein, in maintaining the estimate of bandwidth, the sender maintains a count of packets outstanding.

29. (Original) The system according to claim 28, wherein, in maintaining the estimate of bandwidth, the sender maintains current an upper bound on how many packets are allowed to be outstanding.

30. (Original) The system according to claim 29, wherein the upper bound is as specified by the TCP congestion window.

31. (Original) The system according to claim 25, wherein, in maintaining the estimate of bandwidth, the sender maintains a count of bytes outstanding.

32. (Original) The system according to claim 31, wherein, in maintaining the estimate of bandwidth, the sender maintains current an upper bound on how many bytes are allowed to be outstanding.

33. (Original) The system according to claim 32, wherein the upper bound is as specified by the TCP congestion window.

34. (Original) The system according to claim 25, wherein the processor is instructed further for retransmitting a packet which has been determined by the receiver as having been lost in transmission or received with an error.

35. (Original) The system according to claim 25, wherein the processor is instructed further for adapting bandwidth required by the data.

36. (Original) The system according to claim 25, wherein the processor is instructed further for discriminating between packets lost due to congestion in the network and packets received with at least one bit error.